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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,381

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Walter Niederstaetter

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PROPAT, L.L.C.

425-C SOUTH SHARON AMITY ROAD

CHARLOTTE, NC 28211-2841

EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,381	Applicant(s) NIEDERSTAETTER ET AL.	
	Examiner ELLEN S. WOOD	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, 6-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merritt et al. (US 7,001,635, hereinafter "Merritt") in view of Ahlgren et al. (US 6,203,750, hereinafter "Ahlgren") in view of Cruz (US 2004/0062834).

Merritt discloses a casing that is made from plastics or polyamides (col. 6 lines 55-57). The shirred stick casings are self-sustaining and adapted for stuffing with products, particularly emulsions that form sausages (col. 6 lines 11-13). The casings are made from plastics or polyamides (col. 6 lines 55-57), which are considered soft polymers. A typical additive to a casing is a plasticizer (col. 6 lines 62-65). The casings are stuffed to form individual links (col. 11 lines 7-9), thus it would be known to one of ordinary skill in the art that the casings were closed at one end. The tubular casings are typically gathered into compressed shirred ("pleated") sticks using well-known processes and equipment (cols. 6-7 lines 65-67 and line 1). During the shirring

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operation it is common to coat the casing, particularly the inner surface, with a solution that contains ingredients such as anti-pleat lock agents to form shirred stick casings with self-sustaining properties (col. 7 lines 1-13). The examiner considers this a temporary setting of the shirring geometry and the resultant breakdown in tension of the shirred pleats. The method of forming a shirred sausage casing and filling the casing with meat on a high speed fully automatic (FAM) mechanical stuffer (col. 11 lines 7-9). The individual casings stuffed with meat were produced (col. 11 line 9). In general the polyamide used for the casing is nylon (col. 1 lines 62-63), which is an aliphatic polyamide. The plasticizer can include propylene glycol (col. 8 lines 6-9).

Merritt is silent with the specific properties that are associated with the self-sustaining shirred stick casing such as the bending percentage and the extension of the shirred food casing after shirring.

Merritt discloses that when shirred casing stick are used with automatic food stuffing equipment it is extremely important that shirred casing stick has the durability to be a self-sustaining article (col. 8 lines 58-61). Thus, it would be obvious to one of ordinary skill in the art at the time of the invention that if the shirred casing stick is self-sustaining the amount of bending under the effect of the casings own weight would be minimal to none.

Merritt discloses that the formation of the shirred casing sticks will have sufficient coherency to hold together from immediately after shirring to storage (cols. 8-9 lines 67 and 1-7). Thus, it would be obvious to one of ordinary sill in the art at the time of the

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invention that if the shirred casing stick maintains its shape after shirring the amount of extension in the longitudinal direction would be minimal to none when stored.

Ahlgren discloses a polyamide containing casing which are shirred for use as cook-in casings for the packaging of processed meat products, such as ham, turkey, bologna, etc (col. 1 lines 11-18). The film from which the casing is made contains a layer comprising at least two polyamides (col. 2 lines 9-11). The filing of various types of casing with viscous meat emulsion can be carried out by various automatic and semi-automatic processes (col. 14 lines 50-52). Apparatus and processes are well known in the food casing art for producing shirred, tubular casings (col. 14 lines 58-59). Such apparatus may be employed in the preparation of pleated and compressed tubular casing wherein the compression ratios are in the order of at least about 40:1 and up to about 100:1 or even greater (col. 14 lines 60-63). Using suitable food stuffing machinery, casing lengths can be stuffed with particulate or comminuted viscous material such as meat emulsion or the like, and thereafter formed into unit size lengths, using metal clips and/or heat seals (col. 14 lines 63-67). Merritt discloses that the tubular casings are typically gathered into compressed self-sustaining shirred sticks (col. 6 lines 65-67). Thus, it would be obvious to one of ordinary skill at the time of the invention that the compression ratio of Ahlgren would be used to form the shirred sticks of Merritt, because the apparatus and processes that use the compression ratios of Ahlgren are well known in the food casing art to form shirred, tubular casings (col. 14 lines 58-59).

Ahlgren is silent with the water vapor permeability and the bending effects of the shirred food casing.

Cruz discloses a polyamide-based sausage casing suitable for use with uncooked meats (abstract). The shirred stick casing is a polyamide based film [0020]. The shirred stick casing that is produce is sufficiently rigid for transportation to sausage manufacturers and provides sufficient resistance to premature unshirring and breakage during the filling process [0035]. The examiner considers the shirred stick casing of Cruz to have sufficient intrinsic stability to be processed on a stuffing machine. The polyamide resin blend can be biaxially stretch-oriented to produce a single-layered polyamide-based sausage casing (abstract). The thickness of that the shirred stick has a film thickness that ranges from 6 microns to about 80 microns [0031], thus the thickness is less than 90 μm (1 micron equals 1 μm). The shirred stick casing is a polyamide based film [0020], which is considered a soft synthetic polymer. The shirred stick casing has excellent gas and moisture permeability properties (abstract). The shirred stick casing is produced from an aliphatic polyamide or copolyamide based resin [0022].

Cruz is silent with regards to the specific properties of the water vapor permeability and corona treating the outside surface.

Cruz discloses that the polyamide resin is blended a silicon-based barrier control agent for the specific purpose to increase the permeability of the sausage casing (abstract). Thus, it would be obvious to one of ordinary skill in the art at the time of the invention that the water vapor permeability of the sausage casing disclosed by Cruz

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could be adjusted as required for particular applications because the Cruz teaches how to adjust the gas and moisture barrier properties of the casings. (abstract).

Cruz discloses that the single-layered polyamide based sausage casings can have the printing of words, numbers, and graphics [0037]. Corona treating increases the surface energy of plastic films to improve wet ability and adhesion of inks. Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to corona treat the outer surface of the shirred food casing to improve the adhesion of inks when printing words, number, and graphics onto the casings.

It would be obvious to one of ordinary skill in the art to combine the stability of the casing of Ahlgren with the water vapor permeability properties of Cruz with the formation of the shirred casings of Merritt, because the combination of Cruz and Ahlgren would form a shirred casing that is a polyamide mixture that would improve the strength of the casing during stuffing of the sausage emulsion while maintaining the water vapor permeability properties and can be formed with the proper dimensions as seen in Merritt to form a casing that does not need the use of an separate support on an automatic stuffing machine.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3, 4, 6-19 and 21-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/
Supervisory Patent Examiner, Art Unit 1794